

Abstract

A valve assembly for attachment in an aperture of a fuel tank wall includes a cap member with a nozzle, a carrier stage, a float stage, and a float housing. The carrier stage has a carrier carrying a sealing element with a relatively larger orifice opposing a relatively smaller orifice. The float stage includes a pivot pin and a float defining a stem. The pivot pin is movably located on the stem with the sealing element located apart from the float. The float contacts a portion of the sealing element during a refilling condition, and the sealing element seals the nozzle to prevent overfilling the fuel tank. The orifices permit the valve assembly to reopen in stages.